

WHAT IS CLAIMED IS:

1. A method for heating a plurality of ceramic bodies, comprising:
- 5 a) providing ceramic-forming raw materials and blending the raw materials with an effective amount of vehicle and forming aids to form a plastic mixture therefrom and thereafter forming the plastic raw material mixture into a plurality of green bodies;
- 10 b) placing each one of said plurality of green bodies in proximity to an adjacent one of said plurality of green bodies such that upon heating with electromagnetic waves each green body is subject to no more than about 1.5 times the power density at the boundary than in the bulk thereof; and
- 15 c) drying the green bodies utilizing energy in the form of electromagnetic waves.
2. The method of claim 1, wherein said energy is in the form of microwave energy.
- 20 3. The method of claim 2, wherein said proximity of adjacent bodies is a distance of no more than about $\frac{1}{2}$ the wavelength of said microwave energy.
- 25 4. The method of claim 1, wherein said energy is in the form of RF energy and each green body is subject to no more than about 1.5 times the power density in two dimensions at the boundary than in the bulk thereof.
5. The method of claim 4, wherein said proximity of adjacent bodies is a distance perpendicular to the field of the RF energy.
- 30 6. The method of claim 1, wherein said ceramic body is a honeycomb cellular cordierite body.

7. The method of claim 1, wherein said ceramic body is a zircon refractory brick body.

5 8. The method of claim 1, wherein said ceramic body is a silicon carbide honeycomb body.

9. The method of claim 6, further comprising:

d) heating the green bodies up to a maximum temperature of between about 1360 °C and about 1435 °C to produce fired bodies that are predominantly cordierite, wherein the firing comprises utilizing a combination of microwave and convective or radiative heating during periods where the green bodies are subject to an endothermic reaction or phase transition.

10. The method of claim 9, wherein the firing comprises utilizing a combination of microwave and convective or radiative heating during the clay water loss region ranging from a temperature of from about 450 °C to about 600 °C.

11. The method of claim 9, wherein the firing comprises utilizing a combination of microwave and convective or radiative heating during the talc water loss region ranging from a temperature of from about 830 °C to about 1000 °C.

12. The method of claim 9, wherein said firing further comprises placing each one of said plurality of green bodies in proximity to an adjacent one of said plurality of green bodies within a firing chamber such that upon heating with electromagnetic waves each green body is subject to no more than about 5 times the power density at the boundary than in the bulk thereof.